



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,739	04/19/2005	Jean-Luc Carrez	MART0880US	8815
24235	7590	04/04/2006	EXAMINER	
LEVINE & MANDELBAUM 444 MADISON AVENUE 35TH FLOOR NEW YORK, NY 10022			ROST, ANDREW J	
			ART UNIT	PAPER NUMBER
			3751	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	10/527,739	CARREZ ET AL.	
	Examiner	Art Unit	
	Andrew J. Rost	3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-11 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 12-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Preliminary Amendment filed on 04/27/2005. No new claims have been canceled. Claims 1-11 have been amended. Claims 12-18 have been added. Presently, claims 1-18 are pending.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "10" and "12" have both been used to designate the notches on the raised element (8). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lotz et al. (6,536,742) in view of Szymczakowski et al. (5,832,959).

Regarding claim 1, Lotz et al. disclose a cock with a rotating key (3) that rotates in a housing (1) with the key being introduced axially into the housing and limited by blocking means of a bead (7) and an annular groove (8) and the housing having an inlet and an outlet and the housing having a raised element containing eight annularly arranged studs (Col. 2, lines 38-44) integrally formed on the base of the housing with the studs having locking ribs that interact with an interior portion of a ring of the base of the key. The interaction of the studs and ring are of a notch and stub interaction (shown in Fig. 3). The interaction between the housing and the ring is an elastic relationship (Col. 2, lines 38-44). Lotz et al. does not disclose the notches and stubs interacting in the a reduced diameter portion of the housing. However, Szymczakowski et al. teach the barrel and key of a cock valve contain a reduced diameter portion (section 34) that

Art Unit: 3751

contain indexing means (rib 36) for improving the manner in which the key is held inside the barrel. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention make the indexing means of Lotz et al. located in a reduced diameter section of the housing as taught by Szymczakowski et al. in order to achieve an improvement in holding the key inside the housing.

In regards to claim 6, the modified Lotz et al. reference discloses the studs are located on an interior portion of the housing and forms a smaller diameter area that interacts with the key.

In regards to claim 9, the modified Lotz et al. reference discloses the key having a rib (7) that fits into a groove (8) for securing the key in the housing.

In regards to claim 10, the modified Lotz et al. reference discloses a ring having a circular cross section in an undeformed state and when the ring is placed in a deformed state, the ring would attain an elliptical shape.

In regards to claim 11, the modified Lotz et al. reference discloses a ring that when interacting with the studs to rotate the key has an elastic effect which causes the to deform while being rotated with the deformation from the circular rest state would be an elliptical state.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Lotz et al. reference.

The modified Lotz et al. reference discloses a cock having a key with stubs that interact with a raised portion of a housing that have notches and the lower portion of the

key having the stubs is elastically deformable. The modified Lotz et al. reference does not disclose expressly placing a succession of convex sectors alternating with concave sectors on the raised portion. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to place a succession of convex sectors alternating with concave sectors on the raised portion. Applicant has not disclosed that having a succession of convex sectors alternating with concave sectors on the raised portion provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the studs formed integrally with the housing with each stud having a locking rib that interacts with the ring of the key.

Therefore, it would have been an obvious matter of design choice to modify the modified Lotz et al. reference to obtain the invention as specified in claim 8.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Lotz et al. reference as applied to claim 2 above, and further in view of Smith (1,187,788).

The modified Lotz et al. reference discloses a cock having a key with stubs that interact with a raised portion of a housing that have notches and the lower portion of the key having the stubs is elastically deformable. The modified Lotz et al. reference does not disclose the housing and key have a substantially frustro-conical shape. However, Smith teaches a narrowing conical shape to be old in the art of cock valves. Therefore,

it would have been obvious to one of ordinary skill in the art at the time the invention was made to shape the housing and key of the modified Lotz et al. reference as a narrowing conical shape as taught by Smith in order to help keep the key in the housing.

Allowable Subject Matter

8. Claims 2-5 and 12-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sykora (1,493,133) discloses a cock valve having a frustro-conical shape. Harautuneian (3,185,179) discloses a cock valve having a raised portion on the inside portion of the housing. Waldbillig (3,783,900) discloses a cock valve that has passages in the lower portion of the key. Speelman et al. (4,073,314) discloses a cock valve having a screw threaded into the base of the housing and key. Walker et al. (5,443,453) discloses a cock valve for a medical device having a rigid protrusion on the interior of the housing that interacts with the key. Huber, Jr. (6,164,328) discloses a rotary plug valve that has slots in the lower portion of the key that interact with protrusions on a connecting ring.

Art Unit: 3751

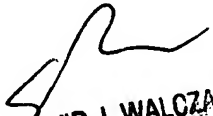
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Rost whose telephone number is 571-272-2711. The examiner can normally be reached on 7:30-5 M-Th and 7:30-5 every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew J Rost
Examiner
Art Unit 3751



DAVID J. WALCZAK
PRIMARY EXAMINER